

Abstract

The invention relates to a common rail injector for injecting fuel into a combustion chamber of an internal combustion engine, having an injector housing (7, 8, 31, 32, 39, 40), which has a fuel supply line (3, 4) which communicates with a central high-pressure fuel source (2) outside the injector housing and with a pressure chamber (15; 63) inside the injector housing, from which pressure chamber, as a function of the position of a control valve, especially a 3/2-way valve, fuel subjected to high pressure is injected.

To create a common rail injector which can be produced economically and which functions reliably even at high pressures, the control valve, in particular the 3/2-way valve, includes a valve piston (34), movable back and forth in the injector housing between a position of repose and an injection position, which piston is coupled hydraulically with a piezoelectric actuator (43) that is subjected to the pressure from the high-pressure fuel source (2).

(Fig. 1)